

SUBSTITUTE FORM PTO-1449 (MODIFIED) U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary) (37 C.F.R. § 1.98(b))	Attorney Docket No.	50318/014001
	Serial No.	10/594,295
	Applicant	Schofield et al.
	Filing Date	September 26, 2006
	Group	1741 1657
	IDS Filed	March 21, 2007

U.S. PATENT DOCUMENTS						
Examiner's Initials	Document Number	Publication Date	Patentee or Applicant	Class	Subclass	Filing Date (If Appropriate)
/P.M./	4,446,038	05/01/84	Schlicht et al.			
↓	5,206,343	04/27/93	Henke et al.			
	5,916,898	06/29/99	Edwards et al.			
	6,200,974	03/13/01	Edwards et al.			
	6,566,088	05/20/03	McKnight et al.			
	2003/0176317	09/18/03	Guenzler-Pukall et al.			
↓	2003/0153503	08/14/03	Klaus et al.			
/P.M./	2004/0053977	03/18/04	Almstead et al.			

FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION						
Examiner's Initials	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation (Yes/No)
/P.M./	03/080566	10/02/03	WIPO			
/P.M./	04/035812	04/29/04	WIPO			

OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PLACE OF PUBLICATION)	
/P.M./	Asikainen et al., "Stabilization of HIF-1Alpha and Release of VEGF by Prolyl-4-Hydroxylase Inhibition in Human Lung Cells," Free Radical Bio. Med. 35:410 Suppl. 1, 2003.
/P.M./	Aoyagi et al., "Prolyl 4-Hydroxylase Inhibitor is More Effective for the Inhibition of Proliferation than for Inhibition of Collagen Synthesis of Rat Hepatic Stellate Cells," Hepatol. Res. 23:1-6, 2002.
/P.M./	Baader et al., "Inhibition of Prolyl 4-Hydroxylase by Oxalyl Amino Acid Derivatives <i>in vitro</i> , in Isolated Microsomes and in Embryonic Chicken Tissues," Biochem. J. 300:525-530, 1994.
/P.M./	Baader et al., "Interference in Clinical Laboratory Tests, with Special Regard to the Bilirubin Assay: Effects of a Metabolite of the New Prolyl 4-Hydroxylase Inhibitor, Luftronil," Eur. J. Clin. Chem. Clin. Biol. 32:515-520, 1994.

EXAMINER	/Paul Martin/	DATE CONSIDERED	01/08/2009
EXAMINER: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with the next communication to applicant.			

SUBSTITUTE FORM PTO-1449 (MODIFIED)	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	Attorney Docket No.	50318/014001
		Serial No.	10/594,295
		Applicant	Schofield et al.
		Filing Date	September 26, 2005
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)		Group	1444 1657
		IDS Filed	March 21, 2007
(37 C.F.R. § 1.98(b))			

/P.M./	Bickel et al., "Beneficial Effects of Inhibitors of Prolyl 4-Hydroxylase in CCl ₄ -Induced Fibrosis of the Liver in Rats," J. Hepatol. 13(Suppl. 3):S26-S34, 1991.
	Bickel et al., "Selective Inhibition of Hepatic Collagen Accumulation in Experimental Liver Fibrosis in Rats by a New Prolyl 4-Hydroxylase Inhibitor," Hepatol. 28:404-411, 1998. not provided
/P.M./	Cunliffe et al., "Inhibition of Prolyl 4-Hydroxylase by Hydroxyanthraquinones," Biochem. J. 239:311-315, 1986.
	Cunliffe et al., "Novel Inhibitors of Prolyl 4-Hydroxylase 3. ¹ Inhibition by the Substrate Analogue N-Oxaloglycine and Its Derivatives," J. Med. Chem. 35:2652-2658, 1992.
	Dowell et al., "Novel Inhibitors of Prolyl 4-Hydroxylase, Part 4. Pyridine-2-Carboxylic Acid Analogues with Alternative 2-Substituents," Eur. J. Med. Chem. 28:513-516, 1993.
	Franklin et al., "Inhibition of Collagen Hydroxylation by 2,7,8-Trihydroxyanthraquinone in Embryonic-Chick Tendon Cells," Biochem. J. 261:127-130, 1989.
	Franklin et al., "Therapeutic Approaches to Organ Fibrosis," Int. J. Biochem. Cell Biol. 29:79-89, 1997.
	Franklin et al., "Inhibition of Prolyl 4-Hydroxylase <i>in vitro</i> and <i>in vivo</i> by Members of a Novel Series of Phenanthrolinones," Biochem. J. 353:333-338, 2001.
	Friedman et al., "Prolyl 4-Hydroxylase is Required for Viability and Morphogenesis in <i>Caenorhabditis Elegans</i> ," Proc. Natl. Acad. Sci. U.S.A. 97:4736-4741, 2000.
↓	Hewitson et al., "Hypoxia-Inducible Factor (HIF) Asparagine Hydroxylase is Identical to Factor Inhibiting HIF (FIH) and is Related to the Cupin Structural Family," J. Biol. Chem. 277:26351-26355, 2002.
/P.M./	Higashide et al., "Alahopcin, a New Dipeptide Antibiotic Produced by <i>Streptomyces Albulus</i> Subsp. <i>Ochragerus</i> Subsp. Nov.," J. Antibiot. 38:285-295, 1985.
	Ivan et al., "Biochemical Purification and Pharmacological Inhibition of a Mammalian Prolyl Hydroxylase Acting on Hypoxia-Inducible Factor," Proc. Natl. Acad. Sci. U.S.A. 99:13459-13464, 2002.
	Lerner et al., "X-Ray Crystal Structure of a Bisubstrate Inhibitor Bound to the Enzyme Catechol-O-Methyltransferase: A Dramatic Effect of Inhibitor Preorganization on Binding Affinity," Angew. Chem. Int. Ed. 40:4040-4042, 2001.
	Mahon et al., "FIH-1: A Novel Protein that Interacts with HIF-1 α and VHL to Mediate Repression of HIF-1 Transcriptional Activity," Genes Dev. 15:2675-2686, 2001.
	Main et al., "The Folding and Design of Repeat Proteins: Reaching a Consensus," Curr. Opin. Struct. Biol. 13:482-489, 2003.
↓	McNeill et al., "A Fluorescence-Based Assay for 2-Oxoglutarate-Dependent Oxygenases," Anal. Biochem. 338:125-131, 2005.
/P.M./	Mosavi et al., "The Ankyrin Repeat as Molecular Architecture for Protein Recognition," Protein Sci. 13:1435-1448, 2004.

EXAMINER /Paul Martin/	DATE CONSIDERED 01/08/2009
EXAMINER: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with the next communication to applicant.	

SUBSTITUTE FORM PTO-1449 (MODIFIED)	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	Attorney Docket No.	50318/014001
		Serial No.	10/594,295
		Applicant	Schofield et al.
		Filing Date	September 26, 2006
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)		Group	111 1657
(37 C.F.R. § 1.98(b))		IDS Filed	March 21, 2007

/P.M./	Mytlyharju et al., "Collagens and Collagen-Related Diseases," Ann. Med. 33:7-21, 2001.
↓	Nwogu et al., "Inhibition of Collagen Synthesis with Prolyl 4-Hydroxylase Inhibitor Improves Left Ventricular Function and Alters the Pattern of Left Ventricular Dilatation after Myocardial Infarction," Circulation 104:2216-2221, 2001.
↓	Ohta et al., "The Absolute Configuration of P-1894B, A Potent Prolyl Hydroxylase Inhibitor," Chem. and Pharm. Bulletin 32:4350-4359, 1984.
↓	Philipp et al., "Prolyl 4-Hydroxylase Inhibition Induces HIF and Improved Cardiac Function after Myocardial Infarction," Circulation 106 (Suppl. S.):II-267, Abstract No. 1344, 2002 (Abstract only).
↓	Schultz et al., "SMART, a Simple Modular Architecture Research Tool: Identification of Signaling Domains," Proc. Natl. Acad. Sci. U.S.A. 95:5857-5864, 1998.
↓	Wang et al., "Structure of <i>Aquifex Aeolicus</i> KDO8P Synthase in Complex with R5P and PEP, and with a Bisubstrate Inhibitor: Role of Active Site Water in Catalysis," Biochem. 40:15676-15683, 2001.
↓	Wu et al., "Mechanism-Based Inactivation of the Human Prolyl-4-Hydroxylase by 5-Oxaproline-Containing Peptides: Evidence for a Prolyl Radical Intermediate," J. Am. Chem. Soc. 121:587-588, 1999.
/P.M./	International Preliminary Report on Patentability from International Application No. PCT/GB2005/001150. 11/15/2005

EXAMINER	/Paul Martin/	DATE CONSIDERED	01/08/2009
EXAMINER: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with the next communication to applicant.			

SUBSTITUTE FORM PTO-1449 (MODIFIED) U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary) (37 C.F.R. § 1.98(b))	Attorney Docket No.	50318/014001
	Serial No.	10/594,295
	Applicant	Schofield et al.
	Filing Date	September 26, 2006
	Group	1711
	IDS Filed	March 21, 2007

U.S. PATENT DOCUMENTS						
Examiner's Initials	Document Number	Publication Date	Patentee or Applicant	Class	Subclass	Filing Date (If Appropriate)
	4,446,038	05/01/84	Schlicht et al.			
	5,206,343	04/27/93	Henke et al.			
	5,916,898	06/29/99	Edwards et al.			
	6,200,974	03/13/01	Edwards et al.			
	6,566,088	05/20/03	McKnight et al.			
	2003/0176317	09/18/03	Guenzler-Pukall et al.			
	2003/0153503	08/14/03	Klaus et al.			
	2004/0053977	03/18/04	Almstead et al.			
FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION						
Examiner's Initials	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation (Yes/No)
	03/080566	10/02/03	WIPO			
	04/035812	04/29/04	WIPO			
OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PLACE OF PUBLICATION)						
	Asikainen et al., "Stabilization of HIF-1Alpha and Release of VEGF by Prolyl-4-Hydroxylase Inhibition in Human Lung Cells," Free Radical Bio. Med. 35:410 Suppl. 1, 2003.					
	Aoyagi et al., "Prolyl 4-Hydroxylase Inhibitor is More Effective for the Inhibition of Proliferation than for Inhibition of Collagen Synthesis of Rat Hepatic Stellate Cells," Hepatol. Res. 23:1-6, 2002.					
	Baader et al., "Inhibition of Prolyl 4-Hydroxylase by Oxalyl Amino Acid Derivatives <i>in vitro</i> , in Isolated Microsomes and in Embryonic Chicken Tissues," Biochem. J. 300:525-530, 1994.					
	Baader et al., "Interference in Clinical Laboratory Tests, with Special Regard to the Bilirubin Assay: Effects of a Metabolite of the New Prolyl 4-Hydroxylase Inhibitor, Lufironil," Eur. J. Clin. Chem. Clin. Biol. 32:515-520, 1994.					

EXAMINER	DATE CONSIDERED
EXAMINER: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with the next communication to applicant.	

SUBSTITUTE FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE (MODIFIED) PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary) (37 C.F.R. § 1.98(b))	Attorney Docket No.	50318/014001
	Serial No.	10/594,295
	Applicant	Schofield et al.
	Filing Date	September 26, 2006
	Group	1711
IDS Filed	March 21, 2007	

	Bickel et al., "Beneficial Effects of Inhibitors of Prolyl 4-Hydroxylase in CCl ₄ -Induced Fibrosis of the Liver in Rats," J. Hepatol. 13(Suppl. 3):S26-S34, 1991.
	Bickel et al., "Selective Inhibition of Hepatic Collagen Accumulation in Experimental Liver Fibrosis in Rats by a New Prolyl 4-Hydroxylase Inhibitor," Hepatol. 28:404-411, 1998.
	Cunliffe et al., "Inhibition of Prolyl 4-Hydroxylase by Hydroxyanthraquinones," Biochem. J. 239:311-315, 1986.
	Cunliffe et al., "Novel Inhibitors of Prolyl 4-Hydroxylase 3. ¹ Inhibition by the Substrate Analogue <i>N</i> -Oxaloglycine and Its Derivatives," J. Med. Chem. 35:2652-2658, 1992.
	Dowell et al., "Novel Inhibitors of Prolyl 4-Hydroxylase, Part 4. Pyridine-2-Carboxylic Acid Analogues with Alternative 2-Substituents," Eur. J. Med. Chem. 28:513-516, 1993.
	Franklin et al., "Inhibition of Collagen Hydroxylation by 2,7,8-Trihydroxyanthraquinone in Embryonic-Chick Tendon Cells," Biochem. J. 261:127-130, 1989.
	Franklin et al., "Therapeutic Approaches to Organ Fibrosis," Int. J. Biochem. Cell Biol. 29:79-89, 1997.
	Franklin et al., "Inhibition of Prolyl 4-Hydroxylase <i>in vitro</i> and <i>in vivo</i> by Members of a Novel Series of Phenanthrolinones," Biochem. J. 353:333-338, 2001.
	Friedman et al., "Prolyl 4-Hydroxylase is Required for Viability and Morphogenesis in <i>Caenorhabditis Elegans</i> ," Proc. Natl. Acad. Sci. U.S.A. 97:4736-4741, 2000.
	Hewitson et al., "Hypoxia-Inducible Factor (HIF) Asparagine Hydroxylase is Identical to Factor Inhibiting HIF (FIH) and is Related to the Cupin Structural Family," J. Biol. Chem. 277:26351-26355, 2002.
	Higashide et al., "Alahopcin, a New Dipeptide Antibiotic Produced by <i>Streptomyces Albulus</i> Subsp. <i>Ochragerus</i> Subsp. Nov.," J. Antibiot. 38:285-295, 1985.
	Ivan et al., "Biochemical Purification and Pharmacological Inhibition of a Mammalian Prolyl Hydroxylase Acting on Hypoxia-Inducible Factor," Proc. Natl. Acad. Sci. U.S.A. 99:13459-13464, 2002.
	Lerner et al., "X-Ray Crystal Structure of a Bisubstrate Inhibitor Bound to the Enzyme Catechol-O-Methyltransferase: A Dramatic Effect of Inhibitor Preorganization on Binding Affinity," Angew. Chem. Int. Ed. 40:4040-4042, 2001.
	Mahon et al., "FIH-1: A Novel Protein that Interacts with HIF-1 α and VHL to Mediate Repression of HIF-1 Transcriptional Activity," Genes Dev. 15:2675-2686, 2001.
	Main et al., "The Folding and Design of Repeat Proteins: Reaching a Consensus," Curr. Opin. Struct. Biol. 13:482-489, 2003.
	McNeill et al., "A Fluorescence-Based Assay for 2-Oxoglutarate-Dependent Oxygenases," Anal. Biochem. 336:125-131, 2005.
	Mosavi et al., "The Ankyrin Repeat as Molecular Architecture for Protein Recognition," Protein Sci. 13:1435-1448, 2004.

EXAMINER	DATE CONSIDERED
EXAMINER: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with the next communication to applicant.	

SUBSTITUTE FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE (MODIFIED) PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary) (37 C.F.R. § 1.98(b))	Attorney Docket No.	50318/014001
	Serial No.	10/594,295
	Applicant	Schofield et al.
	Filing Date	September 26, 2006
	Group	1711
	IDS Filed	March 21, 2007

	Myllyharju et al., "Collagens and Collagen-Related Diseases," Ann. Med. 33:7-21, 2001.
	Nwogu et al., "Inhibition of Collagen Synthesis with Prolyl 4-Hydroxylase Inhibitor Improves Left Ventricular Function and Alters the Pattern of Left Ventricular Dilatation after Myocardial Infarction," Circulation 104:2216-2221, 2001.
	Ohta et al., "The Absolute Configuration of P-1894B, A Potent Prolyl Hydroxylase Inhibitor," Chem. and Pharm. Bulletin 32:4350-4359, 1984.
	Philipp et al., "Prolyl 4-Hydroxylase Inhibition Induces HIF and Improved Cardiac Function after Myocardial Infarction," Circulation 106 (Suppl. S.):II-267, Abstract No. 1344, 2002 (Abstract only).
	Schultz et al., "SMART, a Simple Modular Architecture Research Tool: Identification of Signaling Domains," Proc. Natl. Acad. Sci. U.S.A. 95:5857-5864, 1998.
	Wang et al., "Structure of <i>Aquifex Aeolicus</i> KDO8P Synthase in Complex with R5P and PEP, and with a Bisubstrate Inhibitor: Role of Active Site Water in Catalysis," Biochem. 40:15676-15683, 2001.
	Wu et al., "Mechanism-Based Inactivation of the Human Prolyl-4-Hydroxylase by 5-Oxaproline-Containing Peptides: Evidence for a Prolyl Radical Intermediate," J. Am. Chem. Soc. 121:587-588, 1999.
	International Preliminary Report on Patentability from International Application No. PCT/GB2005/001150.

EXAMINER	DATE CONSIDERED
EXAMINER: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with the next communication to applicant.	